



LICORICE FERN NATURAL AREA on Thornton Creek

(formerly known as Thornton Creek Park #1)

Final Improvements Planning Report

October 2011

For:

Friends of Licorice Fern Natural Area
Seattle Department of Parks & Recreation
Seattle Department of Neighborhoods

By:

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with

EarthCorps Science

Web Version

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INTRODUCTION

Licorice Fern Natural Area on Thornton Creek, formerly known as Thornton Creek Park #1, is a 7.83 acre publicly-owned natural area located in northeast Seattle immediately south and east of Jackson Park Golf Course. The site is bounded to the west by 10th Avenue NE, to the south by NE 130th Street and to the north and east by private properties and the street ends of NE Brockman Place, 11th Avenue NE and an alley between 10th and 11th Avenues NE. The park's address is 13002 10th Avenue NE. The main public access is located at 1100 NE 130th Street.

Maps of the park and vicinity are shown on Figures 1 and 2. To view Figures 1 and 2, click on the following links:

[Figure 1_Thornton Creek Park 1_map.pdf](#)

[Figure 2_Jackson Park Vicinity_SUN Habitat Map.pdf](#)

The park was purchased by the City of Seattle in 1971 "... for park, recreation and open space purposes." (from files of Don Sherwood, 191601981, Park Historian). Seattle Department of Parks and Recreation (Seattle Parks) is the property owner and manager.

The major features in the park include the North Branch of Thornton Creek, which flows through the middle of the predominantly forested wetland site. The site vegetation is currently dominated by deciduous trees, such as red alder, bigleaf maple, black cottonwood and lombardy poplar. Numerous springs and side channels flowing through the wetlands add to the creek's base flow.

Formation of Friends of Thornton Creek Park #1 (Friends) occurred in spring 2010. The founding members of the Friends include park neighbors and local school teachers. The shared goals of the Friends include stewarding the natural area, promoting environmental restoration and education, involving lots of community volunteers, and creating a more connected community.

One of the first actions of the Friends was applying for a Seattle Department of Neighborhoods (DON) Small and Simple Neighborhood Matching Grant in July 2010. The purpose of this grant was to fund an improvements planning process for the park with an emphasis on community outreach and education. Goals for future improvements include restoring and preserving the natural area, improving water quality in Thornton Creek, providing pedestrian access in the park, and creating opportunities for environmental awareness and learning.

The grant application was successful and Friends of Thornton Creek Park #1 were awarded \$18,000. A Small and Simple Project Funds Agreement with DON was signed in late October/early November 2010.

See Appendix A – Department of Neighborhoods & Friends of Thornton Creek Park #1 Agreement. To view Appendix A, click on the following link:

[Appendix A_DON & Friends TCP1 Agreement_SignedNov 2010.pdf](#)

Subsequently a consultant selection process was undertaken by the Friends, starting with a Request for Qualifications advertised in the Daily Journal of Commerce in November 2011. Many consultant proposals were submitted and reviewed by the Friends' Steering Committee members, with three firms shortlisted and interviewed on 30 December 2010. Final selection, and announcement of the selected consultant team, GAYNOR, Inc. with EarthCorps Science as subconsultant, occurred on 1 February 2011. A consultant contract with GAYNOR, Inc. was finalized and signed on 25 February 2011.

PLANNING PROCESS IN A NUTSHELL

This report is a summation of the Improvements Planning process completed by Friends of Thornton Creek Park #1 and the consultant team in accordance with the \$18,000 Small and Simple Project Funds Agreement. Additional detail on each step of the planning process is provided in later sections of this report, including all of the products and documents created and gathered during the process.

The park planning process focused on providing three public meetings for community outreach and input. Two Seattle Department of Parks and Recreation (Seattle Parks) Proview review meetings were also held for owner input and approval. The time line for these meetings, as well as for Friends Steering Committee planning meetings, was as follows:

- Kick-off Meeting with Friends Steering Committee, Pam Kliment, Seattle Parks and Allynn Ruth, Dept of Neighborhood, held on 8 March 2011
- Public Meeting #1 held on 18 April 2011
- Friends Steering Committee Planning Meeting held on 9 May 2011
- Thornton Creek Park #1 Site Tours held on 21 May 2011
- Seattle Parks Proview Meeting #1 held on 24 May 2011
- Public Meeting #2 held on 31 May 2011
- New park name, **Licorice Fern Natural Area on Thornton Creek**, officially announced on 9 June 2011. Name replaces Thornton Creek Park #1.
- Friends Steering Committee Planning Meeting held on 6 July 2011
- Seattle Parks Proview Meeting #2 held on 19 July 2011
- Public Meeting #3 held on 28 July 2011
- Follow-up Friends Steering Committee Planning Meeting held on 31 August 2011
- Community Party held 15 October 2011, to celebrate the park, its new name and new habitat & trail plans

Seattle Parks and Friends put together a postcard mailer to notify the community of the upcoming planning process and public meeting schedule. The three public meetings were scheduled for 6:30 – 8:30 pm at St. Matthew Parish Conference Rooms, located in the neighborhood at 1240 NE 127th Street. Over 500 postcards were mailed and/or hand delivered to the surrounding neighborhood prior to the first public meeting.

See Figure 3 – Public Meeting Postcard. To view Figure 3, click on the following link:

[Figure 3_TCP1_Public Mtg Postcard Mailer.pdf](#)

In addition to conducting and facilitating meetings, the GAYNOR consultant team completed detailed site research prior to the first public meeting. The work included collecting historic aerial photos and performing on site field analysis. Site history and analysis, along with preliminary goals for park improvement, were presented at the first public meeting. This first public meeting also included a facilitated design charette or workshop session, with small groups of citizens working together around tables to discuss and determine community priorities and ideas for the park.

After much discussion and some disagreement, the community attendees at the first public meeting successfully clarified the priorities of the park improvement goals. First priority is shared between restoring native habitats and keeping the park wildlife-friendly. Second priority, and some would say a distant second or third priority, is providing LIMITED public access into the park.

With goals for park improvement prioritized, GAYNOR created conceptual design alternatives for habitat restoration and trails, as well as compiled comments from Public Meeting #1. During the second public meeting process, the alternative plans and related documents were presented to the Steering Committee, Seattle Parks and at Public Meeting #2, for input and comment.

The first Seattle Parks Proview meeting held garnered city staff comment, input and overall approval of the process and concepts to date. As a major partner in the Green Seattle Partnership, Seattle Parks supports native habitat restoration in parks and natural areas. For pedestrian trails, preference is for crushed rock trails that are easily installed and maintained by volunteers. Boardwalks and bridges, which would be needed for trails through wetland areas and at creek crossings, are expensive. Being generally beyond the ability of volunteers, boardwalks and bridges require professional contractor assistance, both for installation and maintenance.

The second public meeting involved a detailed discussion of the concept plans with many questions answered and comments recorded. At the close of the second public meeting, a straw poll was taken on which habitat and trail alternatives the community attendees preferred. The habitat alternative that includes the most habitat types and diversity becomes the clear favorite.

The trails alternative that received the most “votes” includes two short, upland trail lengths. One handicap accessible “overlook” trail would extend west from the main park entry along the north edge of NE 130th Street. The other semi-accessible trail would utilize the old driveway grade ending at the former homestead site overlooking the park. Both of these trails would be crushed rock and could be installed and maintained by volunteers, as Seattle Parks prefers. Of the remaining trails alternative votes, three went to a newly-created “no planned trails” alternative, and the rest split between several other trail alternatives that would provide greater access into the wetland and creek areas of the park. The wetland and creek access alternatives would require the construction of boardwalks and bridges.

Responding to the comments and preferences recorded during the second public meeting process, GAYNOR revised and refined the concepts for native habitat restoration and trails into preliminary preferred plans for presentation during the third public meeting process. Suggested “next step” short- and long-term projects, with approximate implementation costs, were also provided and discussed at both the second Seattle Parks Proview and community public meetings.

Seattle Parks offered some suggestions and gave overall approval of the preliminary preferred plans at the second Proview meeting. Community members discussed plan elements and focused on the recommended short-term (3-5 year) project list, helping set priorities for project implementation and funding. Four projects emerged as “top priority”, including:

- Planting 500 native conifers in the park
- Improving the main park entrance on NE 130th Street
- Setting up training plots for native habitat restoration
- Obtaining a SDOT permit for NE 130th Street right-of-way restoration

Improvements to the main Park entrance on NE 130th Street includes installing a new 4-foot kiosk and park sign. Preference for a new park sign is to keep it simple with just the new park name, “Licorice Fern Natural Area,” and to have it attached to and/or be part of the kiosk.

The Final Plans and Top Priority Projects included in the Conclusion section incorporate the comments and input received during the third public meeting process.

DETAILED PLANNING PROCESS

STEP 1: Site Analysis & Goals / Public Meeting #1

Site History

The existence of many large western red cedar stumps onsite, several with visible springboard notches, is evidence that this site was previously dominated by native conifers, but was logged in the early part of the 20th century. The site's anecdotal history includes being the location of a log mill, known as Little's Mill.

From the 1950's until approximately 1971, a homesite existed within the current park boundaries. This home was located at the current main entrance to the park at 1100 NE 130th Street. Stories from local elders tell of the area being farmed with raspberries and hops, and the creek being dammed during this period to create a pond. Water from the creek pond was used to irrigate the upland farm fields.

Historic aerials from the 1930s until the mid-1970s document the increasing, largely residential, development of the area. Landmarks include Jackson Park Golf Course northwest of the park and Bitter Lake southwest of the park, visible in all the historic aerial photos from 1936 onward. A large oval, former polo field east of the park is partially visible in the 1936 and 1946 aerial photos. The former homestead site located within the park is most evident in the 1956 and 1960 aerial photos. After being purchased by the City of Seattle in 1971 for park purposes, the house at the homestead site is demolished by the 1974 aerial. Built during the 1960s, Interstate 5, west of the park, shows up only in the 1974 aerial photo. Also visible in the 1974 aerial is the Bridgehaven condominium development, which was constructed in the early 1970s at the northeast corner of the park. By 1974, with the construction of Bridgehaven, the immediate neighborhood around the park is fully developed.

Since 1971, improvements in the park have been limited to Thornton Creek enhancement (large woody debris and weir installation) and creek corridor native habitat restoration done by Seattle Public Utilities (SPU) between 1994 and 1999 and in 2008. Some invasive species removal and native planting has also been done by neighborhood volunteers over the past 15 years. Volunteer restoration efforts have been focused on the area of the old homestead, along Thornton Creek and along the northeast edge of the property near the Bridgehaven condominium development. The first record of the park as an official Green Seattle Partnership site was in February 2008, which involved planting 38 native trees and 400 native shrubs by SPU and EarthCorps. No other park improvements have been made to date, including no park signage or planned trails. Existing trails are either social, unplanned paths, maintenance trails that are enabling restoration of parts of the site, or wildlife corridors.

See Figure 7 – Historic Aerials. To view Figure 7, click on the following link:

[Figure 7_TCP1_HistoricAerials.pdf](#)

Existing Site Conditions

City of Seattle Environmentally Critical Area folio maps show that the park is layered with several critical areas: steep slopes of 40% or more; liquefaction-prone areas; riparian corridor and wetlands; and urban wildlife habitat conservation areas. Onsite field observations confirm the existence of all these environmental and site conditions.

Although no wetland delineation has been done to date in the park, the site is predominantly wetland (approximately 5.86 acres). The edges of the park are largely man-made upland fill slopes as a result of surrounding home and road development during the 1930s to 1970s. Some of the constructed fill slopes are steeper than 2:1 or 50%, such as along 10th Ave NE and behind some homes on NE 130th Street, 11th Ave NE and NE Brockman Place. The only natural upland topography appears to be north

of the creek and south of the man-made fill slopes from 11th Avenue NE to the alley between 10th and 11th Avenues NE, and within the park projection or “finger” extending between homes on the east side of 11th Avenue NE.

The most striking discovery from field visits and analysis is the existence of myriad springs, many with enough flow to form defined channels extending through wetlands to Thornton Creek. The springs occur throughout the park and on all sides surrounding the creek. Most of the natural springs emerge upslope within the park forming sloping wetlands. Many of the springs bubble out at the base of man-made fill slopes, which could indicate that wetlands were filled by development and likely extended beyond the current park boundaries prior to development.

Soils within the park generally fall into two categories: organic muck and peat in the wetlands and well-drained outwash sandy-silt soils on the upland slopes. The existence in the park and neighborhood of the native western white pine, which is generally limited to well-drained sites, is further indication of well-drained upland soils. Although a detailed soil analysis of the park site has not been done to date, understanding the glacial history of the region provides clues to the park's soils. Moving glaciers compacted and created impermeable glacial till soils. As glaciers receded, the meltwater washed out ground-up rock as sands and gravels. These two common glacial soil types appear to be the situation at Licorice Fern Natural Area. Impermeable glacial till forms the creek valley floor on top of which organic material has collected as wetlands formed. Upland slopes, extending uphill from the elevation of the natural springs, consist of sandy, well-drained glacial outwash soils. The springs occur at the interface between the impermeable till and well-drained sandy outwash soil layers.

Currently the site is dominated by mature deciduous tree species, including native red alder, bigleaf maple and black cottonwood. A windrow of aged lombardy poplars defines the old homestead property lines. These “pioneer species” trees are common within logged areas that have not been replanted with conifers, as is evidently the case with Licorice Fern Natural Area. The existence of many large western red cedar stumps in the park attests to the likely previous habitat condition of the park as a conifer-dominated forested wetland.

All of the existing deciduous tree species on site are reaching the end of their life span and are breaking and falling. Confirming the current forest's decline, at least six mature trees were observed to fall or break apart within a two month period in spring 2011. Trees lost included three lombardy poplars, at least one large bigleaf maple and several red alders.

Invasive species are also contributing to the current forest's decline. Predominant among the invasives are Himalayan blackberry and English ivy, with smaller populations of English holly, English and Portuguese laurel, black cottonwood, yellow iris and non-native rose, among other non-native species. Stands of highly invasive and difficult-to-eradicate Japanese knotweed and reed canary grass also exist within the park. The invasive species are most prevalent around the perimeter of the park on previously disturbed fill slopes and throughout the former homestead site within the park. However, the invasives are spreading from these initial footholds, with English ivy being the widest spread invasive in the park.

Some human activity is also adding pressure on the park's native habitat and creek. There is evidence of dumping, including debris and yard waste, and of adjacent street and residential roof water runoff being directed into and around edges of the park. Some of the pipes bringing runoff into the park, both from street drainage and private yards, outlet onto steep slopes, causing erosion and potential slope destabilization. Dumping and stormwater runoff both potentially degrade habitat, increase erosion and introduce pollutants, decreasing water quality in Thornton Creek.

More optimistically, many native species, perhaps original to the site, are hanging on in the park, often hidden underneath a canopy of Himalayan blackberry and other invasives. Observed on site are many vine maples and large stands of salmonberry with osoberry and red elderberry. Dense wetland

meadows consisting of skunk cabbage with an understory of false lily-of-the-valley are largely invasive-free. The prevalence of licorice fern growing on old bigleaf maple trees provided the inspiration for the new park name. In the natural uplands area between 10th and 11th Avenues NE, the native orange honeysuckle vine rambles as a groundcover along with salal, sword fern and long-leaved Oregon grape.

City-sponsored and volunteer planting of conifers, mainly western red cedar and Douglas fir, and wetland shrubs, such as western ninebark, twinberry and redtwig dogwood, over the past 15 years is also a positive factor. Many of the new conifers are reaching heights of 20-30 feet or more and the shrubs have reached mature heights of 6-8 feet or more. The successful establishment of these previously planted native trees and shrubs bodes well for future park restoration efforts.

Wildlife in the park is a major focus and of great interest to the surrounding community. Anecdotally, species seen using and/or living in the park include coyote, raccoon, opossum, otter, Cooper's hawk, owls, great blue heron, salmon and other fish species, and myriad woodpeckers, songbirds and waterfowl. Field observations found ample evidence of wildlife use, particularly in the west and east-northeast areas of the park that are least accessible to humans. Several mammal-related burrows and dens were discovered on site along with narrow tracks or paths likely used as wildlife corridors. Trees throughout the site display signs of woodpecker holes and cavity-nesting. Standing in the park, the amount and variety of birdsong, particularly in early spring before the nesting season (which is March – July) is incredible and one of the attributes that people visiting the park most cherish. The abundance of off-stream wetlands and pools could also make the site good amphibian habitat, although no amphibians were observed and none mentioned anecdotally.

See Figure 8 – Urban Forest Scenarios, Figure 9 – Site Photos, Figure 10 – Existing Habitat and Figure 11 – Site Analysis. To view Figures 8 – 11, click on the following links:

[Figure 8_TCP1_UrbanForestScenarios.pdf](#)

[Figure 9_TCP1_Site Photos.pdf](#)

[Figure 10-TCP1-Exist Habitat_80' scale.pdf](#)

[Figure 11_TCP1_Site Analysis.pdf](#)

Public Meeting #1 & Workshop

The main purpose of this meeting was to take the pulse of the community, determine what its priorities for the park truly are and what ideas community members may have for park improvement. To notify the community, postcards were mailed and/or hand delivered to over 500 households surrounding the park. See Figure 3 – Public Meeting Postcard. In addition, flyers and posters, Figures 4 and 5, were distributed and posted around the neighborhood.

To view Figures 3, 4 and 5 click on the following links:

[Figure 3_TCP1_Public Mtg Postcard Mailer.pdf](#)

[Figure 4_TCP1_First Meeting Poster.pdf](#)

[Figure 5_TCP1_First Meeting Flyer.pdf](#)

The agenda for Public Meeting #1 included approximately 15 minutes of an Open House-style meeting to allow people to arrive and view the project goals, site history and site analysis posters displayed. Figures 6 through 11 include the six posters displayed at Public Meeting #1.

Three stated goals for improving the park were displayed and include:

- Preserve and Restore Native Habitats & Plant Communities
- Keep the Park Wildlife-Friendly
- Provide Environmentally-Sensitive Pedestrian Access

See Figure 6 – Stated Goals & Objectives. To view Figure 6, click on the link following link:

[Figure 6_TCP1_Goals & Objectives.pdf](#)

To view the site history and analysis posters, See Figure 7 – Historic Aerials, Figure 8 – Urban Forest Scenarios, Figure 9 – Site Photos, Figure 10 – Existing Habitat, and Figure 11 – Site Analysis. To view Figures 7 – 11, click on the following links:

[Figure 7_TCP1_HistoricAerials.pdf](#)

[Figure 8_TCP1_UrbanForestScenarios.pdf](#)

[Figure 9_TCP1_Site Photos.pdf](#)

[Figure 10-TCP1-Exist Habitat_80' scale.pdf](#)

[Figure 11_TCP1_Site Analysis.pdf](#)

A Friends Steering Committee member gave a brief welcome and introduced the Friends of Thornton Creek Park #1, as well as city project managers and staff present. Some background about the Friends was also given and discussed, including why the group formed, the Department of Neighborhoods (DON) grant received and the planning process that is underway with the first public meeting.

Friends' presentation was followed by a brief presentation by GAYNOR, including an overview of the planning process, and how the design workshop session would work. The displays about the site's history and environmental analysis, summarized on the preceding pages, were also presented. To help people understand why urban forest restoration is needed, a graphic display depicting the decline of urban forests to date and showing two scenarios for the future, one with and one without human restoration assistance, drove home the message that without people's help forests in the city would eventually disappear, replace by weed-infested meadows and scrublands.

See Figure 8 – Urban Forest Scenarios, link provided above.

The meeting was attended by approximately 44 total citizens from the neighborhood and Thornton Creek watershed, including a number of upset people living near the park, who had many fears and some misinformation. People had fears and outrage about the park being “developed” and ruined, that people outside the community were being encouraged to visit and use the park, and that the park and neighborhood would be negatively impacted (crime, vandalism, homeless encampments). Some people continued to describe the park as “pristine,” despite the site analysis information presented that gave evidence to the contrary. The biggest point of contention was about trails in the park and the resulting disruption of wildlife, loss of privacy, increased trespassing, crime and the like.

Figure 12 is the sign-up sheet for Public Meeting #1. To view Figure 12, click on the following link:

[Figure 12_TCP1_Public Mtg 1_SignupSheets.pdf](#)

Several very vocal people dominated the meeting until the attendees were broken into seven smaller groups of 2-8 people at round tables to discuss the stated goals for the park and their priorities, issues and ideas. The groups met for an hour or more. A spokesperson from each group's table was designated to “report back” to everyone attending the meeting with a summary of that group's discussion, including their priorities and goals. Individual comment sheets were also provided to all attendees so that individual views on the stated goals, and other park-related issues, could also be communicated.

A compilation of the group tables' “reporting back summaries” and individual comment sheets, including letters and emails submitted before and after the meeting, is found in Figure 13.

To view Figure 13, click on the following link:

[Figure 13_TCP1_Public Mtg 1_Input & Comments.pdf](#)

In addition, scans of original individual comment sheets may be viewed at the following links:

[TCP1 Public Mtg 1 Comment Sheets](#)

[TCP1 Public Mtg 1 Map Comments Set 1](#)

[TCP1 Public Mtg 1 Map Comments Set 2](#)

The following is a brief summary of the 30-31 Individual written comment sheets received at Public Meeting #1.

- Native Habitat Preservation & Restoration – all positive comments, especially for cedar tree planting.
- Keeping Park Wildlife-Friendly – all positive comments.
7 out of 31 relate wildlife-friendly to no human access
3 out of 31 desire co-habitation of humans & wildlife
- Provide Pedestrian Access – majority for limited pedestrian access.
20 out of 30 want some sort of pedestrian trails and/or overlooks
4 out of 30 for maintenance access only
6 out of 30 for no pedestrian access

As a result of the community's comments and input, the stated Goals & Objectives for park improvements were revised and prioritized as follows:

#1 Priority Goal – Preserve & Restore Native Habitats

#1 Priority Goal – Keep Park Wildlife-Friendly

#2 Priority Goal – Provide LIMITED, Environmentally-sensitive Pedestrian Access

The meeting was adjourned after some wrap-up discussion and announcements about the upcoming park tours scheduled for Saturday, May 21, from 10 am to noon, and the second public meeting scheduled for May 31, 6:30 – 8:30 pm.

STEP 2: Conceptual Design Alternatives / Public Meeting #2

Because many of the surrounding residents had never visited the park, Friends Steering Committee members gave site tours prior to the second public meeting, on Saturday morning, 21 May 2011. Approximately seven community members dropped by to visit and take a tour of the park.

See Figure 14 – Site Tours Sign Up Sheet. To view Figure 14, click on the following link:

[Figure 14_TCP1 Site Tours_5-21-11_SignUp Sheet.pdf](#)

Prior to the Seattle Park Preview meeting held on 24 May 2011, GAYNOR submitted a memo listing park issues affecting or affected by other city departments, including Seattle Department of Transportation (SDOT), Seattle City Light (SCL) and Seattle Public Utilities (SPU.) For SDOT, the main issue is obtaining permission, and a permit, for restoration and possibly trail development within the undeveloped NE 130th Street right-of-way, which abuts parkland. In addition, several developed street and alley rights-of-way lie within the park's boundaries. This “co-ownership” of Parks and SDOT brings up questions regarding reviews and permits needed if any improvements are proposed within these “co-owned” rights-of-way.

In subsequent discussions with Joshua Erickson, SDOT Arboriculturist, SDOT is supportive of these citizen-driven initiatives to restore and maintain undeveloped rights-of-way for public use, but does not have a final policy to date on permitting requirements. To do restoration and trail-building would likely require a Beautification or a Clear-and-Grub permit, for which plans would need to be submitted. Also

likely is the requirement for a SEPA review process. Licorice Fern Natural Area, as a Green Seattle Partnership (GSP) site, is currently included in a completed SEPA Environmental Checklist for all Seattle parks.

For SCL, existing overhead utilities run along the south side of the NE 130th Street right-of-way. These appear to be distribution lines to residences fronting on 130th. As a heads-up, it was communicated that existing alder trees are rubbing on some of the lines. Also if Friends receive a SDOT permit to restore the undeveloped right-of-way, the question remains regarding what permanent vehicular access SCL would need to maintain the utility pole(s) within the restored area.

SPU issues revolve around street runoff and storm drains that currently outlet into the park and/or to Thornton Creek. Improving water quality in the park and creek is a high priority, so the question is how Friends, Parks and SPU can work together to address these issues. SPU has also indicated the need to replace the partially collapsed Thornton Creek culvert under 10th Avenue NE. Friends would like to know when that work would occur, and whether it would require use of a previously graded access ramp into the park from 10th Avenue NE.

See Figure 15 – City Department Issues. To view Figure 15, click on the following link:
[Figure 15_TCP1_City Dept Issues.pdf](#)

See Appendix B – SEPA Report_All Parks. To view Appendix B, click on the following link:
[Appendix B_SEPA Report - All Parks_V2.pdf](#)

Public Meeting #2, held on 31 May 2011, focused on presenting alternative concepts for habitat restoration and pedestrian trails. The meeting began again with an Open House arrival period followed by a brief recap and summary of comments from the first public meeting, which is included under Step One above and on Figure 16 – Public Meeting #2 Handout. All of the posters shown at the first public meeting were again displayed at Public Meeting #2.

Description of the design alternatives included a “short course” in native plant restoration and ecology. Crime Prevention through Environmental Design (CPTED) concepts were also introduced as being an important basis for the alternatives shown, including the value of well-planned trails, good visibility and overall care of the park. The CPTED design guidelines are available online at
http://www.cptedsecurity.com/cpted_design_guidelines.htm.

A brief summary of the Design Alternatives follows and is included on Figure 16 – Public Meeting #2 Handout. The Habitat Alternatives plan and Trail Alternatives plan are shown on Figures 17 and 18 respectively. To view Figures 16 - 18, click on the following links:

[Figure 16_TCP1 Public Mtg 2 Handout.pdf](#)

[Figure 17_TCP1_Habitat Alternatives.pdf](#)

[Figure 18_TCP1_Trail Alternatives.pdf](#)

HABITAT PRESERVATION & RESTORATION GOALS:

- Remove Invasive Species.
- Restore and Enhance Native Habitat Mosaic
- Preserve and Increase Wildlife Habitat Connections and Corridors

HABITAT ALTERNATIVE COMPONENTS:

- Wetland Forest (WF), consisting of western red cedar-dominated wetland habitat with other native conifer and deciduous trees, understory trees, shrubs and ground covers. Preserve the existing Wet Meadow within the old homestead site.
- Upland Forest (UF), consisting of Douglas fir-dominated upland habitat with other native conifer

and deciduous trees, understory trees, shrubs and ground covers. Provide thorny buffer plants along private property boundaries.

- Scrub Shrub Wetland (SS), consisting of native willow, shrub and emergent wetland plants. This habitat is sunnier and open, and good for a diversity of birds and amphibians.
- Madrone Forest (MF), consisting of a madrone-dominated upland habitat with native drought-tolerant shrubs and ground covers. This habitat is for the sunniest, best drained areas of the park, and is intended to be experimental. If establishment of madrones fails, the area may be restored to Upland Forest instead.
- Invasive species that should be removed are concentrated within disturbed edges and areas of Licorice Fern Natural Area, including man-made fill slopes and the old homestead site. Principal invasives on site include Japanese knotweed, reed canary grass, Himalayan blackberry, English ivy, English and Portuguese laurel, holly, black locust, bird cherry and non-native rose, among other non-native species.

HABITAT RESTORATION ALTERNATIVE COMBINATIONS:

- Alternative A includes two habitat types: Wetland Forest and Upland Forest.
- Alternative B includes three habitat types: Wetland Forest, Upland Forest and Scrub Shrub Wetland.
- Alternative C includes all four habitat types: Wetland Forest, Upland Forest, Scrub Shrub Wetland, and experimental Madrona Forest areas within Upland Forest zones.

Habitat restoration continues to be widely support by the community. In a straw poll vote at the end of the meeting, the decision was unanimous in favor of Alternative C. Alternative C includes all four proposed habitat types and best meets the community's expressed goal of providing the maximum wildlife habitat diversity in the park.

TRAIL ALTERNATIVES GOALS:

- Environmentally-sensitive
- Interesting, Scenic, Experiential / Educational
- Accessible and Safe

Siting environmentally-sensitive trails involves finding the best fit with the site's environment and microtopography, including finding routes along ridges and on high spots to avoid wetland impacts and minimize the need for expensive boardwalks. Sensitive trail siting also includes utilizing already disturbed areas that need restoration and providing a minimum 25-50 foot stream buffer except at bridges or creek overlooks.

Creating interesting and experiential trails includes providing access to a variety of features, views and experiences. Trails should provide educational opportunities for environmental learning and awareness.

Providing accessible and safe trails for all ages should include having as much handicap accessibility as possible. Handicap accessible trails have grades ideally between 5 – 8 percent, and no steeper than 10 percent. Trail user safety and comfort is also provided by opening up and maintaining good visibility and view corridors along trails. People should be able to see others coming along a trail from approximately 50 – 100 feet away.

TRAIL ALTERNATIVE COMPONENTS:

- Old Homestead Trail, consisting of a 4 foot wide crushed rock trail to a park overlook at the old

home site. Total length is approximately 120 lineal feet with an 8-12% slope.

- South Creek Loop, consisting of 4 foot wide crushed rock trail and wetland boardwalk sections for a “rim and wetland walk” south of Thornton Creek. This trail alternative includes a creek overlook deck but no bridges over the creek. Total trail length, which includes the Old Homestead Trail, is approximately 600 lineal feet and may include lengths with slopes over 10% or steps.
- North Creek Loop, consisting of 4 foot wide crushed rock trail, wetland boardwalk sections and two bridges over Thornton Creek. Total trail length, which includes the Old Homestead and parts of the South Creek Loop trails, is approximately 640 lineal feet and may include lengths with slopes over 10% or steps.
- Wildlife View Walk, consisting of a 4 foot wide handicap-accessible crushed rock trail along the north edge of the NE 130th Street right-of-way. This trail starts at the main entrance to the park and extends approximately 180 lineal feet west to an overlook under a large existing bigleaf maple. The trail would be essentially level and completely handicap accessible.

TRAIL ALTERNATIVE COMBINATIONS: Note that all trail alternatives include the Viewpoint/Overlooks

- Alternative A includes the Old Homestead Trail only, which is number 1 on the Trail Alternatives plan.
- Alternative B includes the Old Homestead Trail and Overlook plus South Creek Loop, which is numbers 1 and 2 on the Trail Alternatives plan.
- Alternative C: includes the Old Homestead Trail plus North Creek Loop, which is numbers 1 and 3 on the Trail Alternatives plan.
- Alternative D includes the Old Homestead Trail with South Creek Loop and North Creek Loop, which is numbers 1,2 and 3 on the Trail Alternatives plan. Total trail length for this alternative is 1220 lineal feet or 0.23 mile.
- Alternative E includes the Old Homestead Trail with South Creek Loop and North Creek Loop, plus the Wildlife View Walk. This alternative includes all proposed trails, numbers 1 – 4 on the Trail Alternatives plan, for a total trail length of 1440 lineal feet or 0.26 mile.
- Viewpoint/Overlooks, included in all trail alternatives, are from 10th Avenue NE and the street ends at 11th Avenue NE and NE Brockman Place

Trail routes and issues continue to divide the community. During the straw poll voting, none of the alternatives described above garnered a majority of supporters. However a new trail combination was created during discussion and went on to receive 9 votes out of 21 cast, or approximately 43% of the vote. This new alternative was named Trail Combination B and includes the Old Homestead Trail and Wildlife View Walk, plus improvements to the main park entrance and viewpoint/overlooks.

Preferred Trail Combination B provides the two most handicap-accessible routes that are located on upland. The trails will be made of crushed rock. No boardwalk would be required. Trail Combination B will improve the main park entrance on NE 130th Street and includes providing a new park kiosk and park sign. The preference of many is to combine the kiosk and sign as one structure, and to keep the sign simple with just the new park name, “Licorice Fern Natural Area.”

Pedestrian viewpoint/overlooks from 10th Avenue NE and the street ends of 11th Avenue NE and NE Brockman Place will involve opening up and maintaining views into the park by removing blackberries and other non-native view-blocking vegetation. Non-native vegetation would be replaced with low-growing native shrubs and groundcovers. Other overlook amenities, such as railings, benches or signs, may be determined in the future with specific neighborhood input and agreement.

All of the trail alternatives were redefined by those in attendance at Public Meeting #2. All the new trail combinations, except new Alternative A, include both the Old Homestead Trail and Wildlife View Walk plus the park entrance and viewpoint/overlooks. New Alternative A was created to provide a choice for no planned trail system.

It was noted during the meeting that this new “no planned trails” alternative would not result in no trails in the park. As there are now, unplanned social trails will continue to exist in the park. The community would have no control over where these inevitable unplanned trails occur or to where they lead. A few people changed their final votes after considering this information.

In the end, the new “no planned trails” Alternative A received 3 votes. One of the “no trails” votes was a protest vote from an avid trail supporter in the community.

New Trail Combination C, including the Old Homestead Trail, Wildlife View Walk and South Creek Loop, received 2 votes.

New Trail Combination D, including the Old Homestead Trail, Wildlife View Walk and North Creek Loop, received 2 votes.

Original Trail Alternative E, which includes all trails as well as the park entrance and overlooks, received 5 votes.

It was noted that no single trail alternative received over 50% or a majority of the straw poll vote. Another observation is that a total of 9 votes, equal to the number of votes cast for preferred Trail Combination B, went to trail combinations that would provide more trails in the park.

The community remains split on trails. As such, one recommendation is that the community may wish to re-visit the issue of trails in the future as demand and other conditions change and/or when it seems appropriate.

See Figure 19 – Summary of Votes on Habitat & Trail Alternatives. To view Figure 19, click on the following link:

[Figure 19_TCP1_Public Mtg 2_Alt Vote Summary.pdf](#)

Over 30 people attended Public Meeting #2, including approximately 28 citizens and several city staff members. See Figure 20 – Public Meeting #2 Sign Up Sheets. To view Figure 20, click on the following link:

[Figure 20_TCP1_Public Mtg #2_Sign In Shts & Email Comments.pdf](#)

STEP 3: Preferred Design Plans & Next Steps Projects / Public Meeting #3

Incorporating the comments and straw poll results from Public Meeting #2, GAYNOR prepared preliminary preferred plans and next step recommendations. In advance of Public Meeting #3, the preliminary plans and next steps documents were presented, discussed and approved at a Friends Steering Committee meeting held on 6 July and a second Seattle Parks Proview meeting held on 19 July 2011. Several possible fundraising sources and ideas for implementing projects were offered by Friends at the Steering Committee meeting.

At the third public meeting, held on 28 July 2011, the preliminary preferred plans for habitat restoration and trail improvement were presented and discussed along with recommendations for short- and long-term projects for implementation of the plan elements. Also provided during Public Meeting #3 were several handouts, including a preliminary Plant List for the four habitat types included on the plan and

park-friendly tips for homeowners and park neighbors titled “Beneficial Landscape Management for People & the Park.”

Early in the meeting, a few people dominated the discussion of the plans, making many of the same comments that were given at the first public meeting, and were incorporated into the preferred plans being presented. Eventually other meeting attendees asked that the meeting be allowed to progress. The three individuals left and the plans and proposed “next step” projects were discussed at length by those remaining.

The Habitat Restoration Plan includes all four proposed habitat types and involves the same restoration goals, as presented and preferred at Public Meeting #2. To reiterate, the habitat types include wetland forest (WF), upland forest (UF), scrub shrub wetland (SS), and madrone forest (MF). The restoration goals include removing invasive species, restoring and enhancing diverse native habitat mosaic, and preserving and increasing wildlife habitat corridors and connections.

The Habitat Restoration Plan shows the location of the four habitat zones, as well as approximate locations for wildlife corridors and priority invasive species removal. The plan also indicates special features, including preserving an existing wet meadow within the old homestead site and creating thorny native plant buffers along private property boundaries. Water quality improvement is also included on the restoration plan with the suggestion of several natural drainage systems and/or rain gardens along street edges, at street ends and in the park to treat urban runoff. These stormwater treatment features would require the involvement of and coordination with SPU and SDOT, as well as Seattle Parks.

Restoration of the undeveloped NE 130th Street right-of-way is included on the plan. Currently the right-of-way is dominated by invasive species and is a prime seed source for invasives spreading into the adjacent parkland. Removing invasives and replanting natives, as well as any proposed trail construction, in the right-of-way will require permission and a Beautification or Clear-and-Grub permit from SDOT, as previously mentioned in this report.

See Figure 21 – Preliminary Habitat Restoration Plan. To view Figure 21, click on the following link: [Figure 21_LFNA_Prelim Habitat Plan.pdf](#)

The Trail Plan includes only the Old Homestead Trail (#1) and Wildlife View Walk (#4), as preferred at Public Meeting #2. Trail goals continue to be to provide trails that are environmentally-sensitive, interesting, scenic, experiential, accessible and safe.

A recommendation is made on the Trail Plan to locate a future temporary maintenance trail loop in the approximately location of the previously proposed North Creek Loop trail, with the goal being to find the most upland, previously disturbed route for access to areas needing restoration. This temporary maintenance trail could also be a “test” to see if a suitable route exists for a future expanded trail system that meets all the above trail goals, minimizes the amount of boardwalk, and ultimately is able to gain broad public support.

Suggested improvements on the plan for the NE 130th Street Park Entrance include a new park sign that is preferably combined with a small park kiosk at an associated crushed rock trailhead. Adding a tool box, for storing tools and equipment for volunteer work parties, and a trash can are also recommended.

Pedestrian viewpoints and/or overlooks continue to be shown on the plan at the corners of the park adjacent to 10th Avenue NE, and at the street ends of 11th Avenue NE and NE Brockman Place. Initial improvement of these viewpoints involves removing invasive and view-blocking vegetation and

replanting the areas with low-growing native shrubs and groundcovers to maintain visibility and vistas into the park. The goals of these viewpoints is to promote wildlife watching and general enjoyment of the park without disrupting habitat, and at the same time, increase the overall visibility of and through the site for safety and crime prevention.

See Figure 22 – Preliminary Trail Plan. To view Figure 22, click on the following link:

[Figure 22_LFNA_Prelim Trail Plan.pdf](#)

The majority of the meeting was spent discussing the proposed next step project lists, how the projects would get done, how much volunteer time would be required and setting project priorities. The proposed project list is divided into short-term “3-5 Year Plan” projects and long-term or “Next 15 Years” projects. Short-term and long-term lists are broken into three categories: habitat restoration projects, park entry and trail improvement projects, and environmental education projects. Possible funding sources and preliminary approximate costs are included, particularly for 3-5 year projects and habitat zone plant and material costs.

Handouts listing all the proposed “next step” projects, providing a preliminary plant list organized by habitat zone, and offering homeowner tips for landscape management were passed out at the beginning of the public meeting. This information became subjects of discussion and comment.

See Figure 23 – Conceptual Planning Projects, Figure 24 – Preliminary Plant List, and Figure 25 – Beneficial Landscape Management Tips for Homeowners. To view Figures 23 – 25, click on the following links:

[Figure 23_LFNA_Conceptual Planning Projects.pdf](#)

[Figure 24_LFNA_Prelim Plant List.pdf](#)

[Figure 25_Beneficial Landscape Management Tips for Homeowners.pdf](#)

Of the twelve 3-5 year projects listed on the Conceptual Planning Projects handout, the following five projects rose to top priority status during Public Meeting #3.

Under the “Habitat Restoration” category, top priority was given to the following three projects:

- Planting 500 conifers in the Wetland Forest habitat zone and lower 1/3 slope of the Upland Forest habitat zone. The approximate costs for this project are revised in the Conclusions section.
- Setting up approximately (10) volunteer restoration training plots in Upland Forest habitat management zones and creating composting areas for removed invasives. The approximate costs for this project are revised in the Conclusions section.
- Obtaining a Seattle Department of Transportation permit for restoration and improvements in the NE 130th Street undeveloped right-of-way adjacent to the park. The approximate costs for this project are revised in the Conclusions section.

Other, lower priority but important habitat restoration projects include contracting with Cascade Land Conservancy and/or EarthCorps for professional assistance to eliminate difficult-to-eradicate invasives, clearing invasives to open up views at proposed overlooks and viewpoints, working with SPU and other city departments to install natural drainage systems and/or rain gardens to improve water quality in the park, and installing experimental Madrone Forest areas.

Possible grant funding sources for all Habitat Restoration projects include the King County Grant Exchange “Wild Places in City Spaces” grant (max. \$10,000, 18 month duration); Seattle Department of Neighborhoods (DON) “Small & Simple” or “Small Sparks” grants; local business donations or grants; and community fund-raising. DON “Small Sparks” grants are for \$1,000 maximum.

Under the “Park Entry and Trail Improvements” category, top priority was given to improving the main entry on NE 130th Street. Improvements include installing a park kiosk and sign, and providing an equipment container, including purchasing tools for volunteer work parties. The approximate costs for this project are revised in the Conclusions section.

The third project under this category, constructing the Old Homestead Trail and ADA Wildlife View Trail for an approximate preliminary cost of \$1,000, was considered important, but was recognized as less important than the main park entry. Constructing the Wildlife View Trail along NE 130th Street will also need to occur after obtaining a permit from SDOT.

Possible grant funding sources for the Park Entry project include Seattle DON Neighborhood Matching Fund grant, Seattle Parks Opportunity Fund, local business donations or grants, and community fund-raising.

Under the “Environmental Education” category, the no-cost goal of involving people of all ages in habitat restoration and trail improvement projects was a “shoo-in” for top priority status. Creating educational and interpretive materials that reveal the park's history and environmental features was felt to be important but lower in priority than the top priority projects listed above.

Long-term or “Next 15 Years” projects focus on completing restoration for all 7.8 acres of Licorice Fern Natural Area, plus approximately 0.33 acre of undeveloped NE 130th Street right-of-way, with ongoing maintenance and monitoring of completed restoration sites; completing the agreed-upon trail system and possibly re-visiting concepts to expand the system through a new public process; and providing permanent educational signs or Smart phone-accessible Quick Response Codes for interpretative messages.

During the meeting, several comments and discussion points were recorded. Many are reflected in the priorities set above for recommended projects. In addition, there were questions about adding an estimate of the amount of volunteer time each project would take and wondering where enough volunteers would come from to accomplish the work.

Estimating volunteer time can be difficult but will be added to individual projects if possible. Many ideas and suggestions were discussed regarding volunteer recruitment, including involving local schools and young adults through the Seattle Works program.

A general schedule for restoration work was also described during the meeting. In general, no clearing or other disturbance should occur during the nesting season (March – July). Clearing invasives is best done during August – October. Planting natives is best done during the dormant season, November – February. Maintenance can happen anytime if it is not disruptive to wildlife.

Regarding wildlife, one community member requested that the plant list include wildlife species that use each plant. This was considered beyond the scope of this planning project so the individual offered to take on the task as a special interest project.

Comments from Public Meeting #3 are summarized on Figure 26 – Public Meeting #3 Comments. To view Figure 26, click on the following link:

[Figure 26_Public Mtg 3 Comments.pdf](#)

Approximately 19 community members attended Public Meeting #3. See Figure 27 – Public Meeting #3 Sign In Sheets. To view Figure 27, click on the following link:

[Figure 27_LFNA_Public Mtg #3_Sign In Shts.pdf](#)

CONCLUSION: FINAL PLANS & TOP PRIORITY PROJECTS

The final plans for habitat restoration and trails include all the goals and elements of the preferred Preliminary Habitat Restoration Plan and Trail Plan that were presented and discussed at Public Meeting #3. To help communicate and organize future restoration and monitoring efforts, habitat management zones have been added to the final Habitat Restoration Plan.

The Habitat Management Zones include:

Wetland Forest Zones

- WF-1, 1.97 acres located north of Thornton Creek
- WF-2, 3.11 acres located south of Thornton Creek

Scrub Shrub Zones

- SS-1, 0.17 acre located downstream of the creek culvert under 10th Avenue NE and including area on both sides of Thornton Creek
- SS-2, 0.62 acre located in the NE area of the park near Bridgehaven Condominiums and including area on both sides of Thornton Creek

Upland Forest Zones

- UF-1, 0.33 acre located within the NE 130th Street undeveloped right-of-way and along 10th Avenue NE at the SW corner of the park
- UF-2, 0.44 acre located north of the creek between the ends of 11th Avenue NE and the alley between 10th and 11th Avenues NE
- UF-3, 0.79 acre located north of the creek between 11 Avenue NE and the Bridgehaven Condominiums
- UF-4, 0.38 acre located south of the creek from the main NE 130th Street Entrance eastward along private property boundaries and including the south “greenbelt” finger between two homes
- UF-5, 0.19 acre located south and east of the creek from the street end of NE Brockman Place to the south border of Bridgehaven Condominiums

Madrone Forest Zones

- MF-1, 0.11 acre located north of Thornton Creek within Urban Forest Zone UF-2
- MF-2, 0.04 acre located south of Thornton Creek within Urban Forest Zone UF-4

For the final plans, see Figure 28 – Habitat Restoration Plan and Figure 29 – Trail Plan. To view Figures 28 and 29, click on the following links:

[Figure 28_LFNA_Habitat Restoration Plan-11x17.pdf](#)

[Figure 29_LFNA_Trail Plan-11x17.pdf](#)

From Public Meeting #3 input, the top priority, 3-5 year projects continue to be:

- planting 500 conifers in the park;
- setting up volunteer training plots;
- obtaining a SDOT permit to restore the NE 130th Street right-of-way; and
- improving the main park entrance on NE 130th Street.

A more detailed description and step-by-step process for each of these top priority projects follows.

Project #1: Planting 500 Conifers in Licorice Fern Natural Area

In Wetland Forest habitat management zones, plant a total of 340 western red cedars, 65 western hemlock and 25 Sitka spruce. All trees should be located on hummocks or high spots within the wetlands. Sitka spruce may be located in wettest areas, while western red cedar and western hemlock should be planted in wet-to-moist areas.

On the lower 1/3 of slopes in Upland Forest habitat management zones, plant a total of 10 western red cedar, 10 western hemlock and 55 Douglas fir. Western red cedar and hemlock should be located in moister, shadier locations.

All conifers should be purchased as P-1 or Styro-15 plugs, as specified on the Plant List (Figure 24). Trees meeting these specifications are available at Fourth Corner Nurseries, Bellingham, WA; website at <http://fourthcornernurseries.com/>.

Time to layout, clear, plant, water and mulch each tree may take up to 2 person-hours per tree. To undertake a reasonable level of time commitment, we recommend making this a two year planting project. One-half of the total or 250 trees should be purchased and planted during each winter planting season, which usually extends from mid-November to late February depending on the weather.

We also recommend that professional assistance from GAYNOR and/or EarthCorps staff or others help to lay out and flag tree locations within habitat zones. In addition, EarthCorps can record GPS data points for all tree locations, to facilitate future monitoring and maintenance. Flagging tree locations may occur in stages within specific habitat management zones and should be coordinated with volunteer work parties.

Trees should be color-coded by four different color flags, to make identification of the correct tree species to plant easy for volunteers. After trees are flagged within specific management zones on site, a volunteer work party or parties should be scheduled.

Volunteer work will include the following steps:

- Find a tree flag matching the colored flag included with the tree species heeled into your bucket of mulch
- Clear all invasive species within a minimum 3-foot diameter circle around the flag
- Remove the flag temporarily and plant the tree plug at the flag's location. Be sure to bring all excavated soil back around the tree to form a donut-shaped berm or watering ring. After planting, replace the flag to the side of the newly planted tree.

Note: Proper tree planting techniques should be demonstrated at the beginning of all volunteer work parties.

- Empty the bucket of mulch around the newly planted tree, but be careful to not bury the stem and crown of the tree. Leave the tree crown and stem open to the air to prevent rot. Keep the colored flag that was included in the bucket to the side to return with the bucket for the next tree.
- Use the empty bucket to scoop up at least 1/2 bucket of water from the creek or nearby wetland pool. Water in your newly planted tree.

Note: Although planting in winter ensures that the tree will have generally enough moisture to become established, watering in the tree will settle the soil and avoid air pockets forming around the roots.

- Put the invasives and extra colored flag into the bucket and return to the tree / mulch stockpile or station to fill your bucket with mulch and get another tree to plant.

Besides trees, other materials needed for this project include:

- 600 – 700 colored flags, preferably of 4 different colors to identify tree species
- 12 to 24 wood planks, preferably 12 length 2x10 or 2x12 #2 or better hem-fir boards, to create temporary boardwalk access through wetlands to tree locations.
- Wood chip mulch, free from Seattle Parks

A revised estimate to complete the planting of 500 conifers is approximately \$2,600 and includes:

- \$600 for (500) conifers, P-1 or Styro-15 plugs, including shipping
- \$1,200 for consultant time to help plan, layout trees and train volunteers
- \$75 for up to 700 colored flags of 4 different colors
- \$300 for up to (24) 12' length 2x10 or 2x12 #2 or better hem-fir boards, for temporary boardwalk planks
- \$425 or 20% contingency, for miscellaneous supplies and materials

Project #2: Setting up Restoration Plots for Volunteer Training

Setting up and restoring approximately (10) volunteer restoration plots in Upland Forest habitat management zones will accomplish two goals: 1) restore native habitat in priority invasive removal areas; and 2) involve and train volunteers in restoration techniques. Restoration plots should be strategically located in areas that are most heavily infested with invasive species. The plots should also be spread throughout the park so that volunteers from different areas of the neighborhood may be involved in plots closest to their homes.

Plots should be approximately 500 square feet in size (20' x 25' or more linear with min 10' width). The plot corners should be staked with brightly colored wood or metal survey stakes. Consultant help is recommended to determine plot locations and layout, establish baseline data for existing vegetation, and record GPS points for plot corners. A volunteer time estimate for this project is difficult to determine, as the level of effort can vary greatly based on the specific conditions of each plot.

Restoration should include the following steps and schedule:

August – October

- Remove invasive species by hand, including grubbing out roots. Preserve all native species.
- Create composting/storage areas in already disturbed sites, for disposal of removed invasives. Invasives should be kept off the ground on woody debris platforms or tarps to prevent re-rooting into the soil. Optionally, invasive compost piles may be covered with black plastic to hasten solarization and decay. Compost piles should be monitored and piles turned occasionally to prevent any re-growth, promote composting and avoid putrid anaerobic conditions.
- Immediately after invasives are removed, sheet mulch bare earth areas and around existing native species. Sheet mulching involves laying down a minimum 3-5 layers of cardboard and weighing the sheets down with wood chip mulch. Mulch should be installed over the cardboard to a minimum depth of 6 inches. Leave stems of existing native species open to the air to avoid rot.
- If plots include slopes steeper than 2 1/2 feet horizontal to 1 foot vertical (2 1/2: 1 or 40%), jute matting should be installed over the top of the mulch and secured with metal staples or wood stakes.

November – February/March

- Plant bare root native trees, shrubs and ground covers during the dormant season, which is usually mid- to late November through February. Depending on the weather, the dormant season may extend into mid- to late March.
- Plants installed in restoration plots should represent all layers of the habitat, including trees, understory trees, shrubs and ground covers. Forbs may be added initially or later, as desired. The plant species mix and quantities should be as specified on the Plant List for the Upland Forest Habitat zone, but exclude conifers already being planted on the lower 1/3 slope, which is covered under Project #1 above.

March – July (Nesting Season)

- During the nesting season, plots should be maintained (watered and weeded) and/or monitored for native plant survival and invasive species re-sprout. Consultants including EarthCorps should be involved in training volunteers to utilize proper maintenance and monitoring methods.
- Planting in wetlands, which are moist-to-wet year round, may extend through May.
- In general, no clearing should occur during the nesting season. However, some light clearing or invasives removal may be done if it is determined that no nesting activity is occurring in the work area.

The revised estimate to set up and complete restoration of ten volunteer training plots is approximately \$1,900 - \$2,700, and includes the following:

- \$150 - \$200 per 1000 square feet or total \$750 - \$1,000, for plant materials to revegetate all layers of the Upland Forest habitat zone and for jute matting on 2 1/2:1 or steeper slopes
- \$800 – \$1,200 for consultant time to set up and record plots and train volunteers
- \$350 - \$500 for approximate 20% contingency for composting/storage area tarps, temporary fencing & other miscellaneous materials

Project #3: Improve Licorice Fern Natural Area's Main Entrance on NE 130th Street

Improving and making the main entrance to the park more visible, informational and inviting includes installing a park identification sign, the first this park has ever had. The park was recently re-named. The community consensus is that the park sign's text should simply be the new park name, "Licorice Fern Natural Area."

Adding a small park kiosk at the entrance is also desired. A kiosk would make the entrance more visible, provide a place to post announcements and educational information, and create a small, sheltered meeting place. Physically combining a kiosk with a simple routed or printed plank park sign mounted on the kiosk has been discussed with Friends Steering Committee members and the public and is preferred for its simple, uncluttered, low-key aesthetic.

The trailhead for the Old Homestead and Wildlife View Walk trails would be at the improved entrance. In order to make the Old Homestead Trail as flat and accessible as possible, the entrance should be moved slightly to the west. The trailhead would be 6-inch depth crushed rock, the same as trails.

Because volunteer involvement is key to the successful restoration and improvement of the park, a recommendation is to have an equipment container on site, filled with hand tools, buckets, gloves and the like, for the convenience of work parties. The equipment container should be located near the main

entrance, accessible from trails but not visually obtrusive. One possible location is under an existing conifer tree east of main entry and along the Old Homestead Trail near NE 130th Street.

The following are web links to Seattle Parks standard plans for kiosks, signage, trails, bridges, boardwalks and bollards:

http://www.cityofseattle.net/parks/projects/standards/files/08_Kiosks.pdf

http://www.cityofseattle.net/parks/projects/standards/files/08_Signage.pdf

http://www.cityofseattle.net/parks/projects/standards/files/09_Trail_Standards.pdf

http://www.cityofseattle.net/parks/projects/standards/files/08_Bridges_Boardwalks.pdf

http://www.cityofseattle.net/parks/projects/standards/files/08_Bollards.pdf

The revised estimate for improvements to the NE 130th Street main park entrance is approximately \$6,500 - \$8,000 and includes the following:

- \$3,500 – 4,000 budget for standard Seattle Parks small 4-foot kiosk structure customized with “Licorice Fern Natural Area” sign board, constructed and installed by Parks
- \$500 - \$1,000 budget for GAYNOR services to customize the standard park kiosk design, stake the kiosk location on site, and work with Seattle Parks and Friends to get the kiosk installed
- \$500 budget for standard Seattle Parks equipment container, delivered to the site by Parks
- \$500 budget for crushed rock and miscellaneous trailhead improvements (bollards?) at the main park entrance
- \$500 budget for purchasing tools to be used for volunteer work parties, including shovels, weeding forks, mulch forks, pruners, hand saws, buckets, gloves and the like.
- \$1500 for approximate 20% contingency for miscellaneous expenses and materials

Project #4: Obtain SDOT Permit for NE 130th Street Right-of-way Restoration

Proposed improvements in the NE 130th Street undeveloped right-of-way include clearing invasives, planting native plants and constructing an ADA-accessible crushed rock trail. To legally restore and improve the undeveloped right-of-way adjacent to Licorice Fern Natural Area, a Seattle Department of Transportation (SDOT) permit must be obtained.

Plans must be submitted for SDOT review that outline what actions are proposed in the right-of-way. The initial permit plan review fee is approximately \$175. Depending on the initial review, other permit fees may apply. In addition, a SEPA review may be required.

SDOT is currently revamping their permit process for these types of undeveloped right-of-way improvement projects. Although supportive of volunteer-sponsored efforts, SDOT is working through the legal and permitting requirements needed. Contacts for SDOT permitting include: Joshua Erickson, SDOT Arboriculturist, 206-684-5008; and Liz Sheldon, SDOT Plan Reviewer, .

The final Conceptual Plans included in this document may be sufficient to submit for the initial permit plan review. A SEPA review, for all parks involved in Green Seattle Partnership restoration, has been completed by Seattle Parks and is included in this document as Appendix B. This SEPA document may be acceptable to SDOT in applying for this right-of-way “Beautification” or “Clear-and-Grub” permit. To view Appendix B, click on the following link:

[Appendix B_SEPA Report - All Parks_V2.pdf](#)

The revised estimate to prepare, apply for and ultimately obtain an SDOT Permit to restore habitat and build a trail within the NE 130th Street right-of-way is approximately \$1,500 and includes the following:

- \$600 budget for permit fees including approximate initial permit plan review fee of \$175 (This estimate does not include a new SEPA review process.)
- \$675 for consultant time and expenses to prepare and apply for the permit, including response to comments and additional permit submittals requested by SDOT
- \$250 for approximate 20% contingency for additional fees and/or miscellaneous expenses

Epilogue: Final Words of Wisdom

As the Friends of Licorice Fern Natural Area and community embark on the next phase of project implementation for the park, the following are a few final “words of wisdom:”

- Continue to communicate with each other and the neighborhood. There is no more powerful tool for building support, growing your Friends group and working together effectively than practicing good and respectful outreach and communication.
- Follow the Plan. This is what city of Seattle staff and community members expect will happen.
- Be well organized in all the tasks and projects that are undertaken. Good organization skills will boost your effectiveness, minimize wasted time, and raise your credibility with city staff and community members alike.
- Be mindful of “creature comforts.” Provide refreshments, shelter, seating or whatever comforts people need at community events and work parties. People will appreciate the thoughtfulness and care, and be more willing to come back or continue their involvement.
- Pace yourselves, being careful to avoid taking on more work or projects than you can collectively handle well at any given time.
- Remember to have fun!

That's it! My very best wishes for successful restoration of Licorice Fern Natural Area. I hope you will keep in touch.

Sincerely,



Peggy Gaynor
Principal Landscape Architect, GAYNOR, Inc.

APPENDICES

Appendix A:

Department of Neighborhoods & Friends of Thornton Creek Park #1 Small and Simple Project Funds Agreement

Link: [Appendix A_DON & Friends TCP1 Agreement_SignedNov 2010.pdf](#)

Appendix B:

SEPA Report_All Parks

Link: [Appendix B_SEPA Report - All Parks_V2.pdf](#)

Appendix C:

Pre-Engineered Composite Lumber Floating Boardwalk Manufacturers, including:

- SuperDeck Systems, www.SuperDeckSystems.com
- Wickcraft, www.Wickcraft.com